India 4: 136. 1910; Mathew, Fl. Tam. Carn. 1715. 1982.

Perennial rhizomatous submerged herb; stem branched, compressed. Leaves linear or oblong-elliptic, 2-6 x 0.4-1 cm, membranous, translucent, 3-nerved, glabrous, base amplexicaul, apex rounded, margin crisped and serrulate; sessile; stipules to 4 mm, caducous. Flowers in 0.5-2 cm long spikes, dull-white ; peduncle to 5 cm long. Perianth lobes 4, clawed; stamens 4, ovaries 4, superior. Drupelets orbicular, to 0.2 cm. ridged, beaked, 1-seeded.

> Flowering and fruiting: September - February. Distribution: Nizamabad: rare in tanks. INDIA:

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This taxon is not mentioned in Fl. Pres. Madras. Mathew (1982) reported it as a new record, south of Madhya Pradesh (Central India).

We are grateful to Dr. P.V. Sreekumar, BSI, Coimbatore for his help in identification. Financial assistance from UGC is gratefully acknowledged.

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## 37. INDIAN DOUM PALM HYPHAENE DICHOTOMA IN KHANDESH — AN UNUSUAL OCCURRENCE

REFERENCES

May 25, 1991

Doum palms are the only angiospermous taxa which show true dichotomous branching. The occurrence of the Indian doum palm Hyphaene dichotoma (Wt.) Furtado, was recorded from a few places on the west coast of India. Botanists have (Mahabale studied the morphology and Chennaveeraiah 1957), nature of branching (Greguss 1968), inflorescence (Rao and Korlahalli 1969, Bonde 1987), nutritional composition of fruit (Bonde et al. 1990) and distribution (Rao 1963, 1964; Meher-Homji 1970). According to Rao (1963), it is endemic to Diu, Daman, coast of Gujarat and north Maharashtra. While reporting this taxon, along the west coast of India, he cited a couple of localities (viz. Nagaon, Shirgaon) from Maharashtra in its distribution. These localities, however, clearly fall under coastal area. The present note records the new distribution, i.e. occurrence of H. dichotoma in West Khandesh, Dhule district, Maharashtra, in an area where the vegetation is predominantly dry scrub. So far, the present locality is the only non-coastal area for this species for the whole of Maharashtra. A

couple of old plants and few seedlings grow in dry land near a small village, Methi, in Dhule district.

The entry of the west coast endemic palm to the present locality in West Khandesh which is very far from the former locality is curious. It, however, indicates the discontinuous distribution of the taxon. Discussion with locals indicates that a couple of plants may have been introduced to this locality about 30 years ago. Nevertheless, the present occurrence of this taxon is certainly unusual. The newly growing seedlings support the success of this species in the present locality.

Existing literature shows that the taxon is threatened in many of its natural habitats and facing extinction (Oza 1974, Rao 1963) and it has been included in the list of Threatened Plants of India (Jain and Sastry 1980, 1983). Its occurrence in Khandesh, however, indicates the possibility of extending its distribution. This endangered palm in Khandesh needs immediate protection and multiplication. The locality has been recommended to the Maharashtra

B. RAVI PRASAD RAO T. PULLAIAH Forest Department for barbed-wire fencing as a preserved plot.

For the nomenclature of this taxon, we have followed Furtado (1970), who made new combination and adopted *H. dichotoma* as a correct name with *Borassus dichotoma* Wt. as the basionym

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for the present taxon.

We thank the College authorities for encouragement and help.

May 29, 1991

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## 38. ANOTHER LOCALITY RECORD FOR CYATHEA SPINULOSA IN KUMAON HIMALAYA

Taxonomic reports of various explorers, to date, indicate that there is only one plant of *Cyathea spinulosa* at Pamtori near Thal (Pithoragarh). Our exploration tour of Didihat (Pithoragarh) revealed that there are two instead of the one reported plant of the species at Pamtori near Thal. The two plants are located just 20 m from each other.

In addition we discovered another locality near Mirthy, 1300 m (Pithoragarh). This locality, situated along a ravine in a dense forest area contains approximately 30 plants of *Cyathea spinulosa*. This rare fern faces the danger of extinction as the leaves are used for thatching house roofs by locals.

We wish to inform the concerned authorities that they should take necessary action to demarcate and protect the area containing this fern, in order to prevent extinction of the species.

May 25, 1991

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